



NYC Department of Buildings
280 Broadway, New York, NY 10007
Patricia Lancaster, FAIA, Commissioner
(212) 566-5000, TTY: (212) 566-4769

Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 165-07-E

Manufacturer: Thermal Solutions LLC, 1175 Manheim Pike, Lancaster, PA 17604

Trade Name(s): Evolution Condensing Boiler

Product: Gas-fired hot water boiler assemblies

Pertinent Code Section(s): 27-800, 27-824, 27-826, 27-886, RS 14-2 (ANSI Z223.1)

Prescribed Test(s): RS 14-6 (UL 795)

Laboratory: Underwriters Laboratories, Inc.

Test Report(s): UL file MH25585, dated June 8, 2007.

Description: Gas-fired water-tube condensing boiler assemblies, model EVC, are low-pressure water boilers with a maximum working pressure of 160 psig and a maximum working temperature of 250°F. A secondary heat exchanger recovers additional energy from the outgoing vent gases. These gas-fired boiler assemblies are intended for use with natural gas only. The burners provided with these boilers are of the manufacturers own design and are of the pre-mix power type.

The burners are provided with an interrupted, high-tension spark ignition system for ignition of an interrupted, proved gas pilot, for ignition of the main gas fuel supply. Pilot and main burner flame proving is accomplished by a flame rectification system.

As an option, the boiler assemblies can be installed in direct vent fashion. The direct vent installation consists of combustion air intake connector that allows the boiler assembly to take all air for combustion from outside the occupied space. The combustion air intake is separate from the flue gas vent.

The tabulations given below indicate the basic boiler model, covered fuel input rate, boiler horsepower rating and heating surface for each boiler model.

Basic Boiler Model	Maximum Rated Input (Btu/hr)	Minimum Rated Input (Btu/hr)	Boiler Horsepower Rating (BHP)	Heating Surface (Sq. ft.)
EVC-750	750,000	375,000 / 250,000	19.7	131
EVC-1000	1,000,000	500,000 / 333,000	26.25	175
EVC-1500	1,500,000	750,000 / 500,000	39.4	264
EVC-2000	2,000,000	1,000,000 / 666,000	52.6	352

Terms and Conditions: The above-described gas fired, hot water boiler assemblies are accepted on condition that:

- 1) Boilers are to be constructed in accordance with the ASME Code, RS 14-4.
- 2) Units shall be installed on non-combustible flooring. Minimum clearances to combustible construction shall be as follows:

Top:	6 inches
Front:	24 inches
Sides:	6 inches
Rear:	6 inches
Vent Connector	18 inches
- 3) Units shall be fired with natural gas only.
- 4) Approved gas vent shall be in accordance with Subchapter 15 of the New York City Building Code, and Section 27-886.
- 5) This acceptance in no way includes the external piping, connection and appurtenances thereto, which are required to fully conform to applicable provisions of the law and have been tested in conjunction with this application.
- 6) Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Department's Electrical Advisory Board.
- 7) Units shall be used in compliance with the Energy Conservation Construction Code of New York State.
- 8) All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and accepted for use, as provided in Section 27-131 of New York City Building Code.

NOTE: In accordance with Section 27-131(d), all materials tested and accepted for use shall be subject to periodic retesting as determined by the Commissioner; and any material which upon retesting is found not to comply with Code requirements or the requirements set forth in the approval of the Commissioner shall cease to be acceptable for the use intended. During the period for such retesting, the Commissioner may require the use of such material to be restricted or discontinued if necessary to secure safety.

Final Acceptance September 21, 2007

Examined By Simon Derkhoten